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DATE MAILED: 06/01/2004

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 02/19/2002 1085-031/PWH 7225 09/936,627 Chip Hong Ang 21034 06/01/2004 **EXAMINER** 7590 **IPSOLON LLP** NGUYEN, NAM V 805 SW BROADWAY, #2740 ART UNIT PAPER NUMBER PORTLAND, OR 97205 2635

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/936,627	ANG ET AL.
	Examiner	Art Unit
	Nam V Nguyen	2635
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet w	ith the correspondence address
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR of after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a relif NO period for reply is specified above, the maximum statutory perions Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the main earned patent term adjustment. See 37 CFR 1.704(b).	1.136(a). In no event, however, may a seply within the statutory minimum of third will apply and will expire SIX (6) MONute, cause the application to become Al	reply be timely filed ty (30) days will be considered timely. ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on 19 This action is FINAL . 2b)⊠ The 3)□ Since this application is in condition for allow closed in accordance with the practice under	nis action is non-final. vance except for formal mat	• •
Disposition of Claims		
 4) Claim(s) 1-38 is/are pending in the application 4a) Of the above claim(s) is/are withdrest. 5) Claim(s) is/are allowed. 6) Claim(s) 1-18 and 20-38 is/are rejected. 7) Claim(s) 19 is/are objected to. 8) Claim(s) are subject to restriction and 	rawn from consideration.	
Application Papers		
9) The specification is objected to by the Examination The drawing(s) filed on 19 February 2002 is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction. The oath or declaration is objected to by the Including the correction of the Including the correction.	are: a)□ accepted or b)⊠ ne drawing(s) be held in abeyar ection is required if the drawing	nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents. 2. Certified copies of the priority documents. 3. Copies of the certified copies of the priority application from the International Bure 	nts have been received. nts have been received in A iority documents have been au (PCT Rule 17.2(a)).	pplication No received in this National Stage
* See the attached detailed Office action for a list	st of the certified copies not	received.
Attachment(s)		
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 4. 	Paper No(s	Summary (PTO-413) s)/Mail Date nformal Patent Application (PTO-152)

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DETAILED ACTION

The application of Ang et al. for an "educational tool, entertainment system or search tool" filed November 1, 2001 has been examined.

This application claims foreign priority based on the application 9900926-8 filed March 15, 1999 in Singapore. Receipt is acknowledged of papers submitted under 35 U.S.C 119(a) – (d), which papers have been placed of record in the file.

This application claims priority to a 371 of PCT/GB00/00710, which is filed on February 29, 2000.

A preliminary amendment to the claims 1-38 has been entered and made of record.

Claims 1-38 are pending.

Drawings

This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

The drawings are objected to under 37 CFR 1.83(a) because they fail to label boxes (1-10) in Figure 1 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).

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The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, a counter must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Abstract should be limited to a single paragraph on a separate sheet. See MPEP 608.01(b).

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

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- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or

REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)

- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Objections

Claims 8 and 11 are objected to because of the following informalities: limitations in parenthesis are not given patentable weight.

Claim 12 is objected to because of the following informalities: "programme" misspells of "program". Appropriate correction is required.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7, 11-15, 23, 26-27, 29-35 and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karr (US# 5,661,470) in view of Rose (US# 4,857,030).

Referring to claims 1 and 31, Karr discloses an educational tool, search tool or entertainment system and a method (i.e. an object recognition system in interactive toys) (column 1 lines 31 to 46; see Figure 1) comprising:

A plurality of identification means (21 and 24)(i.e. responders) each associated with a respective item (i.e. an object A; a doll) (column 2 lines 15 to 34; see Figure 1), the identification means (21) comprising programmable machine-readable identification information (i.e. an unique identification pulse) (column 2 lines 49 to 65),

A reader (60) (i.e. a base unit) for detecting and interrogating the identification means (i.e. a unique identification pulse) to identify the respective items (a doll) associated therewith (column 2 lines 36 to 65), and processing means (16) (i.e. a microprocessor) operable to react in a predetermined manner to the identification of the detected item (a doll) (column 3 lines 19 to 35; column 4 lines 16 to 26).

However, Karr did not explicitly disclose a reader being operable to establish the order in which the multiple identification means are detected.

In the same field of endeavor of an automated radio frequency transceiver system, Rose teaches that a reader (10) (i.e. a speech synthesizing system of Unit A) being operable to establish the order in which the multiple identification means (Unit B and Unit C) (i.e. responders) are detected (column 2 lines 32 to 55; column 4 lines 9 to 57; see Figures 1-2) in order to control and to determines routines of simulated conversation of who will be the speaker and who will be responders.

One of ordinary skilled in the art recognizes the need to establish a selection of who is speaker and who are responders to engage in a simulated conversation of a speech synthesizing system of Rose in an object recognition system for identifying toys of Karr because Karr suggests it is desired to provide a base unit determines that a doll is located next to a toy spider could emit a screaming sound to create an exciting and complex play pattern for dolls (column 2 lines 24 to 34) and Rose discloses that a radio frequency transceiver of Unit A will engage in a routine of simulated conversion with other plurality of radio frequency transceivers and will determine who will be the speaker and who will be responders depending on the various inputs in order to have an effective and interesting conversation. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to establish a selection of who is speaker and who are responders to engage in a simulated conversation of a speech synthesizing system of Rose in an object recognition system for identifying toys of Karr with the motivation for doing so would have been to control and to automated each individual

function of a doll in order to simplified and increase intelligent and effective conversation of an object recognition system in interactive toys.

Referring to claims 2 and 32, Karr in view of Rose disclose a system according to Claims 1 and 31, Karr discloses wherein the processing means (16) includes software to cause the system to react in a predetermined manner to the order in which the multiple identification means are detected (column 3 lines 19 to 35; column 4 lines 16 to 26).

Referring to claims 3 and 33, Karr in view of Rose disclose a system according to Claims 1 and 31, Karr discloses wherein the reader (60) includes a counter (17) incrementable each time a particular identification means (21) is interrogated by the reader (60) to provide information concerning the number of times a particular identification means (21) has been interrogated by the reader (60) (column 4 lines 28 to 59; see Figure 1).

Referring to claims 4 and 34, Karr in view of Rose disclose a system according to Claims 3 and 33, Karr discloses wherein a response of the reader (60) is varied in dependency upon the number of times a particular identification means (21) has been interrogated by the reader (60) (column 4 line 28 to column 5 line 9).

Referring to claim 5, Karr in view of Rose disclose a system according to Claim 1, Karr discloses wherein the machine-readable identification information (i.e. unique identification

pulse) is held on a radio frequency transponder (21) (i.e. responder) (column 2 lines 49 to 65; see Figure 1).

Referring to claim 6, Karr in view of Rose disclose a system according to Claim 5, Karr discloses wherein the radio frequency transponder (21) is an passive radio frequency transponder (column 1 lines 31 to 38; column 2 lines 49 to 65; see Figure 1).

Referring to claim 7, Karr in view of Rose disclose a system according to Claim 5, Karr discloses wherein the radio frequency transponder (21) is an active radio frequency transponder (column 5 lines 28 to 38; see Figures 5A-C).

Referring to claim 11, Karr in view of Rose disclose a system according to Claim 1, Rose discloses wherein the machine-readable identification information (i.e. unique identification codes) is held on an in an RF (including microwave and millimetrewave) (column 4 lines 13 to 16; see Figure 1).

Referring to claim 12, Karr in view of Rose disclose a system according to Claim 1, Rose discloses wherein programming means are provided to programme the machine-readable identification information for the identification means (column 3 lines 28 to 32; column 5 lines 51 to 58).

Referring to claim 13, Karr in view of Rose disclose a system according to Claim 1, Karr discloses wherein the reader (60) incorporates the processing means (16) (column 3 lines 19 to 25; see Figure 1).

Referring to claim 14, Karr in view of Rose disclose a system according to Claim 1, Karr discloses wherein the reader (60) incorporates a data storage unit (RAM) (column 4 lines 16 to 27; see Figure 1).

Referring to claim 15, Karr in view of Rose disclose a system according to Claim 1, Karr discloses wherein the processing means (16) includes software to cause the system (60) to react in a different manner to the identification of respective items (21) (column 3 lines 19 to 35; column 4 lines 16 to 46).

Referring to claim 23, Karr in view of Rose disclose a system according to Claim 1, Karr discloses a reader (60) is a toy (i.e. a toy product) (column 2 lines 36 to 48).

Referring to claim 26, Karr in view of Rose disclose a system according to Claim 1, Karr discloses wherein the reader (60) includes a response activation unit which is operable upon detection of an item (21) (column 2 lines 36 to 48).

Referring to claim 27, Karr in view of Rose disclose a system according to Claim 1, Karr discloses wherein the reader (60) is operable to activate a response activation unit associated with the reader (60) upon detection of an item (21) (column 2 lines 36 to 48).

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Referring to claim 29, Karr in view of Rose disclose a system according to Claim 12, Karr discloses wherein the reader (60) includes the programming means (column 3 lines 19 to 55; column 9 lines 20 to 38).

Referring to claim 30, Karr in view of Rose disclose a system according to Claim 1, Rose discloses wherein the item is a person (i.e. a child) (column 2 lines 3 to 7).

Referring to claim 35, Karr in view of Rose disclose a system according to Claim 31, Karr discloses wherein the step of providing information comprises providing a signal operable to control a mechanism (19) (i.e. a motor) (column 2 lines 36 to 48; see Figure 1).

Referring to claims 37 and 38, Karr in view of Rose disclose a system and method as claimed in claim 1, the claims 37 and 38 differ from claim 1 in that the claims require the limitations of claim 3 already addressed above and Karr disclose all limitations to the extent as claimed with respect to claim 3 above and therefore claims 37-38 are also rejected as being obvious for the same reasons given with respect to claim 3 above.

Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karr (US# 5,661,470) in view of Rose (US# 4,857,030) as applied to claim 1 above, and in further view of Kuna et al. (US# 4,729,564).

Referring to claim 8, Karr in view of Rose disclose a system of claim 1, however, Karr in view of Rose did not explicitly disclose wherein the machine-readable identification information is held on an optically (including infrared and ultraviolet) interrogatable medium.

In the same field of endeavor of a responsive electronic game, Kuna et al. teach wherein the machine-readable identification information (40) (i.e. a bar code on a card) is held on an optically (including infrared and ultraviolet) interrogatable medium (column 2 lines 3 to 23; see Figure 3) in order to transmit unique pulse to a microprocessor.

At the time the invention, it would have been obvious to a person of ordinary skill in the art to recognize using a reflected light optical sensor reader to read the bar code of Kuna et al. in the responders reply with a unique frequency which is sensed by base unit of Karr in view of Rose because using an optical sensor for reading bar code on cards improve reliable and accurate that has been shown to be desirable in an object recognition system in interactive toys of Karr in view of Rose.

Referring to claim 9, Karr in view of Rose disclose a system according to Claim 1, Kuna et al. disclose wherein the machine-readable identification information (40) is held on a wired or contact transmitter (column 2 lines 57 to 68).

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Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karr (US# 5,661,470) in view of Rose (US# 4,857,030) as applied to claim 1 above, and in further view of Xia (US# 5,489,827).

Referring to claim 10, Karr in view of Rose disclose a system of Claim 1, however, Karr in view of Rose did not explicitly disclose wherein the machine-readable identification information is held in a sonic or ultrasonic transmitter.

In the same field of endeavor of a remote control system, Xia teaches that the machine-readable identification information (i.e. an identification code) is held in a sonic or ultrasonic transmitter (40) (i.e. an ultrasonic transmitter of a remote dimming controller 40) (column 5 lines 35 to 56; see Figure 1) in order to transmit occupancy signal which is encoded with digital information to control a device.

At the time the invention, it would have been obvious to a person of ordinary skill in the art to recognize the need to use a ultrasonic transmitter of a remote dimming controller of Xia in an object recognition system of Karr in view of Rose because using a ultrasonic transmitter would improve reliable and accurate that has been shown to be desirable in an object recognition system in interactive toys of Karr in view of Rose.

Claims 16-17, 20, 22, 24-25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karr (US# 5,661,470) in view of Rose (US# 4,857,030) as applied to claim 1 above, and in further view of Raj (WO 87/02165).

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Referring to claim 16, Karr in view of Rose disclose a system of Claim 1, however, Karr in view of Rose did not explicitly disclose wherein the reader incorporates a user interface.

In the same field of endeavor of a remote identification system, Raj teaches that a reader (3) (i.e. an interrogator-coder) incorporates a user interface (8) (i.e. an alphanumeric keyboard) (page 16 lines 6 to 17; page 17 lines 4 to 23; see Figure 4A) in order to identify and to locate any material regarding the contents of the tank car.

At the time the invention, it would have been obvious to a person of ordinary skill in the art to recognize the need to have an interrogator-coder includes an alphanumeric keyboard to allow coding of the transponder at the loading station of Raj in an object recognition system of Karr in view of Rose because using an alphanumeric keyboard to allow coding of the transponder would improve reading the exact responder that has been shown to be desirable in an object recognition in interactive toys of Karr in view of Rose.

Referring to claim 17, Karr in view of Rose and in further view of Raj disclose a system of Claim 16, Raj discloses a user interface (10) (i.e. a display screen) includes a video display operable to display information based on the identity of a detected item (4) (i.e. a code transponder unit) (page 16 lines 6 to 17; page 18 lines 27 to 29; see Figures 1 and 4A).

Referring to claim 20, Karr in view of Rose and in further view of Raj disclose a system of Claim 16, Raj discloses wherein the user interface includes a data input device (8) (i.e. a keyboard) (page 16 lines 6 to 17; see Figure 4A).

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Referring to claim 22, Karr in view of Rose disclose a system of Claim 1, and Raj discloses wherein the reader (3) is a portable reader (page 16 lines 18 to 30; see Figures 1-2).

Referring to claim 24, Karr in view of Rose disclose a system of Claim 1, and Raj discloses wherein the or each identification means (i.e. code) is provided in the form of a label attachable to an item (2) (i.e. a fill pipe) (page 16 lines 6 to 17; page 18 lines 8 to 29; see Figures 1 and 4b).

Referring to claim 25, Karr in view of Rose disclose a system of Claim 1, and Raj discloses wherein the or each identification means is locatable in an item (page 16 lines 6 to 17; page 18 lines 8 to 29; see Figures 1 and 4b).

Referring to claims 28, Karr in view of Rose disclose a system according to Claim 1, Karr discloses the reader (60) is operable to count the number of items which are detectable by the reader (60) and provide the count information to a user interface associated with the reader (60) (column 4 lines 27 to 59).

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karr (US# 5,661,470) in view of Rose (US# 4,857,030) and Raj (WO 87/02165) as applied to claim 16 above, and in further view of Kuna et al. (US# 4,729,564).

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Referring to claim 18, Karr in view of Rose and Raj disclose a system of Claim 16, however, Karr in view of Rose and Raj did not explicitly disclose wherein the user interface includes an audio processing unit operable to announce information based on the identity of a detected item.

In the same field of endeavor of a responsive electronic system, Kuna et al. teach that the user interface (12) (i.e. a game housing) includes an audio processing unit (56) (i.e. a voice chip) operable to announce information based on the identity of a detected item (36) (column 1 line 39 to column 2 lines 22) in order to announce the vocabulary of each card.

At the time the invention, it would have been obvious to a person of ordinary skill in the art to recognize the need to add a voice chip with a speaker to announce a word description of Kuna et al. in an object recognition system of Karr in view of Rose and Raj because using a voice chip with a speaker to announce a word description would improve the security that has been shown to be desirable in an object recognition system of Karr in view of Rose and Raj.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karr (US# 5,661,470) in view of Rose (US# 4,857,030) as applied to claim 1 above, and in further view of Park (US# 5,733,131).

Referring to claim 21, Karr in view of Rose disclose a system according to Claim 1, however, Karr in view of Rose did not explicitly disclose wherein a personal computer is associated with the reader to provide the processing means and data storage in addition to or instead of the reader.

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In the same field of endeavor of a remote controlling an entertainment device, Park teaches that a personal computer (28 and 24) is associated with the reader (20) (i.e. a radio signal broadcasting facility) to provide the processing means and data storage in addition to or instead of the reader (20) (column 5 lines 21 to 46; see Figure 1) in order to send a control message to a toy bear doll.

At the time the invention, it would have been obvious to a person of ordinary skill in the art to recognize the need to use a personal computer with a modem to interact with a paging system to send a control message to a toy bear doll of Park in an object recognition system of Karr in view of Rose because using a personal computer to interact with a doll would help improve convenient of play with a toy bear doll that has been shown to be desirable in an object recognition system in interactive toys of Karr in view of Rose.

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karr (US# 5,661,470) in view of Rose (US# 4,857,030) as applied to claim 31 above, and in further view of O'Hagan et al. (US# 5,821,512).

Referring to claim 36, Karr in view of Rose disclose a system of Claim 31, however, Karr in view of Rose did not explicitly disclose the method comprising the further step of programming the reader to search for a specific item.

In the same field of endeavor of a remote controlling a device, O'Hagan et al. teach that the step of programming the reader (22) to search for a specific item (50) (column 12 lines 16 to 34; see Figures 1, 13-14) in order to print the select recipe over a desired item.

At the time the invention, it would have been obvious to a person of ordinary skill in the art to recognize the need to program the reader to search for a desired a dataform of an item of O'Hagan et al. in an object recognition system of Karr in view of Rose because programming the reader to search for a desired item would help to identify items to display recipe on screen quickly that has been shown to be desirable in an object recognition system in interactive of Karr in view of Rose.

Allowable Subject Matter

Claim 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Referring to claim 19, the following is a statement of reasons for the indication of allowable subject matter: the prior art fail to suggest limitations wherein the reader is operable to: select an item that the reader has previously detected; announce or display information based on the identity of the selected item; and react in a predetermined manner in dependency upon whether the next item identified by the reader is the selected item.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nickum (US# 6,359,661) discloses a multiple user profile remote control.

Ting (US# 6,110,000) discloses a doll set with unidirectional infrared communication for simulating conversation.

Chan (US# 6,089,942) discloses interactive toys.

Suman (US# 5,525,977) discloses a prompting system for vehicle personalization.

Duhame et al. (US# 5,541,585) disclose a security system for controlling building access.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nam V Nguyen whose telephone number is 703-305-3867. The examiner can normally be reached on Mon-Fri, 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 703-305-4704. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Nam Nguyen May 24, 2004 MICHAEL HORABIK SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600

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